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APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,394	08/	/30/2001	Steve Van Kirk	303.755US1	3192
21186	7590	05/19/2006		EXAMINER	
SCHWEG	MAN, LUN	DBERG, WOES	DINH, TUAN T		
P.O. BOX 2 MINNEAP	2938 OLIS. MN	55402	ART UNIT	PAPER NUMBER	
	,·			2841	
				DATE MAILED: 05/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
) Office Action Summers	09/945,394	KIRK, STEVE VAN	
Office Action Summary	Examiner	Art Unit	
	Tuan T. Dinh	2841	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  ely filed  the mailing date of this communication.  O (35 U S C § 133)	
Status			
1) Responsive to communication(s) filed on 03 Ma	arch 2006.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.		
3) Since this application is in condition for allowan	ce except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 8-46,48 and 50-65 is/are pending in the 4a) Of the above claim(s) 8-19,21-46,48 and 50 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 20 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or	1 <u>-65</u> is/are withdrawn from consid	eration.	
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the orange Replacement drawing sheet(s) including the correction of the orange replacement or declaration is objected to by the Examiner  11) The oath or declaration is objected to by the Examiner  12. **The oath or declaration is objected to by the Examiner contents and the correction of the oath or declaration is objected to by the Examiner contents and the correction of the contents and the correction of the contents are contents and the contents are contents are contents and the contents are contents are contents and the contents are contents are contents.	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign     a) All b) Some * c) None of:     1. Certified copies of the priority documents     2. Certified copies of the priority documents     3. Copies of the certified copies of the priorical application from the International Bureau     * See the attached detailed Office action for a list of the certified copies.	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage	
Attachment(s)			
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date			

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Art Unit: 2841

#### **DETAILED ACTION**

Claims 1-7, 47, and 49 have been canceled in the response filed on 10/03/05.

Claims 8-19, 21-27, 31-33, 39-42, and 50-64 have been withdrawn and stated from the previous Office actions.

Claims 28-30, 34-38, 43, 44-46, 48, and 65 have been added a new limitations of "<u>the first and second interstices forming a complementary shape</u>" that would not read on Specie XII (figure 15), <u>the limitations does read on figure 5</u>, see the specification paragraph [0050], or page 12, the first paragraph. Further, figure 5 and 15 as described as in the specification, see page 6, lines 24-26 and page 7, lines 20-22, which are shown top plane view of different embodiments.

Therefore, claims 28-30, 34-38, 43-46, 48, and 65 are withdrawn from further consideration as being drawn to non-elected subject matter.

The requirement is still deemed proper and is therefore made FINAL.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Kumagai et al. (U. S. Patent 6,147,573), as in the record.

As to claim 20, Kumagai et al. discloses a circuit board as shown in figures 3B-3C comprising:

first and second conductive layers (20) including first and second interstices (29), wherein the first interstice (29) has a plurality of first widths laying in a first plane, see figure 3B, the width of the first interstice wounded around and parallel with the surface of the conductor layer 20; the second interstice (29) *engaged (interlock or connect together*, see an attached paper of site Answers.com attaching with the Office action) with the first interstice by a dielectric layer (1) disposed between the first and second interstices (29) to form a capacitor (28), wherein the second interstice (29) has a second width laying in a second plan; the first and second planes are substantially parallel, and wherein the second width is substantially overlaps at least two of the plurality of the first width.

## Response to Arguments

Applicant's arguments filed 03/03/06 have been fully considered but they are not persuasive.

Applicant argues:

(a) The first and second interstices (29) of Kumagai et al ('573) do not engage.

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Examiner disagrees because as disclosed in a site of Answers.com (see the attached paper attaching with the Office action) as define that the term "engage" means "interlock", and the "interlock" means "connect together.

Kumagai et al. does disclose the first and second interstices (29) as shown in figures 3B-C that connected together.

(b) Kumagai et al. does not disclose "the second width substantially overlaps at least two of the plurality of the first width."

Examiner disagrees because as shown in figures 3B-C, the reference does show because the first and second interstices wounded around and parallel with the surfaces of the conductor layers 20 having widths, and the width of the second interstice that substantially overlaps at least two of the plurality of the widths of the first interstice.

Examiner believes the rejection is proper.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Dinh

December 01, 2005.

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On this page: Dictionary

# engage

Or did you mean: engagé (Actively), Engage (2002 Album by Pax217), Engage (2003 Album t Stretch Arm Strong), Engage, Inc. (OTC: ENGA)

### **Dictionary**



en·gage (ĕn-gāj')

v.tr.

- 1. To obtain or contract for the services of; employ: engage a carpenter.
- 2. To arrange for the use of; reserve: engage a room. See synonyms at book.
- 3. To pledge or promise, especially to marry.
- 4. To attract and hold the attention of; engross: a hobby that engaged her for hours at a time.
- 5. To win over or attract: His smile engages everyone he meets.
- 6. To draw into; involve: engage a shy person in conversation.
- 7. To require the use of; occupy: Studying engages most of my time.
- 8. To enter or bring into conflict with: We have engaged the enemy.
- 9. To interlock or cause to interlock; mesh: engage the automobile's clutch.
- 10. To give or take as security.

#### v.intr.

- 1. To involve oneself or become occupied; participate: engage in conversation.
- 2. To assume an obligation; agree.
- 3. To enter into conflict or battle: The armies engaged at dawn.
- 4. To become meshed or interlocked: The gears engaged.

[Middle English engagen, to pledge something as security for repayment of debt, from Old French engagier: en-, in; see en-1 + gage, pledge, of Germanic origin.]

en·gag'er n.

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On this page: Dictionary

# interlock

Or did you mean: interlock (engineering)

**Dictionary** 

in·ter·lock (ĭn't¤r-lŏk') 🛫

v., -locked, -lock-ing, -locks.

v.tr.

1. To unite or join closely as by hooking or dovetailing.

2. To connect together (parts of a mechanism, for example) so that the individual parts affect each other in motion or operation.

v.intr.

To become united or joined closely, as by hooking or dovetailing.

n. (ĭn't¤r-lŏk')

- 1. Computer Science. A device or instruction that coordinates two or more processes and prevents one operation from interfering with another.
- 2. A stretchy fabric knitted with interlocking stitches by alternating sets of needles on a circular knitting machine.

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On this page: Dictionary

## connect

Or did you mean: Connect (in poker), Connect (Win API), Sony Connect, Connect (2002 Albui by Mark Farina)

**Dictionary** 

American Herita diestionsars

con·nect (k¤-nĕkt') 📸

v., -nect·ed, -nect·ing, -nects.

v.tr.

- 1. To join or fasten together.
- 2. To associate or consider as related: no reason to connect the two events. See synonyms at join.
- 3. To join to or by means of a communications circuit: Please connect me to the number in San Diego. Her computer is connected to the Internet.
- 4. To plug in (an electrical cord or device) to an outlet.

v.intr.

- 1. To become joined or united: two streams connecting to form a river.
- 2. To be scheduled so as to provide continuing service, as between airplanes or buses.
- 3. To establish a rapport or relationship; relate: The candidate failed to connect with the voters.
- 4. Sports. To hit or play a ball successfully: The batter connected for a home run.

[Middle English connecten, from Latin conectere, connectere: co-, com-, com- + nectere, to bind.]

con·nect'i·ble or con·nect'a·ble adj. con·nec'tor or con·nect'er n.